**EucoRepair V100**

**Low Shrinkage, Fiber Reinforced, NSF/ANSI Standard 61 Certified Vertical & Overhead Repair Mortar**

**Description**

EUCOREPAIR V100 is a single-component, quick-setting, low shrinkage repair mortar formulated with unique polymers and fiber reinforcement for vertical and overhead repairs requiring high performance.

**Primary Applications**

- Vertical and overhead repairs
- Parking structures & bridges
- Water and wastewater treatment facilities
- Marine structures, tunnels, and dams
- Above and below grade applications

**Features/Benefits**

- Single-component for easy mixing and handling
- Excellent freeze-thaw resistance for difficult climates
- Polymer modified with fiber reinforcement
- NSF/ANSI Standard 61 certified
- Contains an integral corrosion inhibitor
- Low permeability helps protect rebar from corrosion
- High bond strength provides excellent adhesion
- Apply coatings after 6 hours at 70°F (21°C)

**Technical Information**

The following are typical values obtained under laboratory conditions. Expect reasonable variation under field conditions.

<table>
<thead>
<tr>
<th>Property</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compressive Strength</td>
<td></td>
</tr>
<tr>
<td>ASTM C 109 modified, 2&quot; (5 cm) cubes, psi (MPa)</td>
<td>3 hours 2,000 (13.8)</td>
</tr>
<tr>
<td></td>
<td>1 day 3,000 (20.7)</td>
</tr>
<tr>
<td></td>
<td>7 days 4,500 (31.0)</td>
</tr>
<tr>
<td></td>
<td>28 days 6,000 (41.4)</td>
</tr>
<tr>
<td>Split Tensile Strength</td>
<td></td>
</tr>
<tr>
<td>ASTM C 496, psi (MPa)</td>
<td>28 days &gt;400 (2.8)</td>
</tr>
<tr>
<td>Flexural Strength</td>
<td></td>
</tr>
<tr>
<td>ASTM C 348, psi (MPa)</td>
<td>7 days &gt;500 (3.4)</td>
</tr>
<tr>
<td></td>
<td>28 days &gt;600 (4.1)</td>
</tr>
<tr>
<td>Bond Strength</td>
<td></td>
</tr>
<tr>
<td>ASTM C 882, psi (MPa)</td>
<td>7 days &gt;1,400 (9.7)</td>
</tr>
<tr>
<td></td>
<td>28 days &gt;1,800 (12.4)</td>
</tr>
<tr>
<td>Length Change</td>
<td></td>
</tr>
<tr>
<td>ASTM C 157 modified (3”x3”x11.25” specimens)</td>
<td>28 days -0.020%</td>
</tr>
<tr>
<td>Unit Weight</td>
<td>~ 120 lb/ft³ (1,922 kg/m³)</td>
</tr>
<tr>
<td>Set Times</td>
<td>Initial: ~ 20 min. Final: ~ 35 min.</td>
</tr>
</tbody>
</table>

**Appearance:** EUCOREPAIR V100 is a free-flowing powder designed to be mixed with water. After mixing and placing, the color may appear darker than the surrounding concrete. While this color will lighten as EUCOREPAIR V100 cures and dries out, the repair may always appear darker than the surrounding concrete.

**Packaging/Yield**

EUCOREPAIR V100 is packaged in 46 lb (21 kg) moisture resistant bags, and 46 lb (21 kg) pails. **Yield:** 0.45 ft³ (0.013 m³) per 46 lb (21 kg) bag/pail when mixed with 1 gal (3.79 L) of water.

**Shelf Life**

1 year in original, unopened package

**Specifications/Compliances**

EUCOREPAIR V100 is NSF/ANSI Standard 61 certified for use with potable water.
One unit of EUCOREPAIR V100 will cover approximately 10.5 ft² (1.0 m²) when placed at an average depth of 1/2" (13 mm).

**Coverage**

**Directions for Use**

**Surface Preparation:** Concrete surfaces must be structurally sound, free of loose or deteriorated concrete and free of dust, dirt, paint, efflorescence, oil and all other contaminants. Mechanically abrade the surface to achieve a surface profile equal to CSP 5 - 7 in accordance with ICRI Guideline 310.2. Properly clean profiled area.

**Priming & Bonding (Saw Cut & Chipped Out Repairs):** Thoroughly clean any exposed reinforcing steel, and apply DURALPREP A.C. to the concrete and the reinforcing steel within the repair area. Refer to the DURALPREP A.C. technical data sheet for full instructions. Alternatively, application of a scrub coat of EUCOREPAIR V100 to the saturated surface dry (SSD) concrete surface may be used for bonding. The repair material must be placed on the scrub coat before the scrub coat dries out.

**Priming & Bonding (Vertical & Overhead Skim Coats/Toppings):** Apply a scrub coat of EUCOREPAIR V100 to the saturated surface dry (SSD) concrete surface. The repair material must be placed on the scrub coat before the scrub coat dries out.

**Mixing:** Single bags may be mixed with a drill and “jiffy” type mixer. Use a paddle type mortar mixer for large jobs. All materials should be in the proper temperature range of 60°F (16°C) to 90°F (32°C). Add the appropriate amount of water, 0.9 to 1 gal (3.40 to 3.79 L)/bag into a clean mixing vessel, then add the dry product. Mix for 3 to 5 minutes. Do not mix more material than can be placed within 15 minutes.

**Placement:** Place in 1/8" to 4" (3 to 100 mm) lifts for vertical surfaces and 1/8" to 2" (3 to 50 mm) lifts for overhead applications. Trowel into place and allow to reach final set before the next lift. If additional lifts are required, score the surface of the placed mortar before it reaches final set.

**Finishing:** Finish the repair material to the desired texture. Do not add additional water to the surface during the finishing operation. Use EUCOBAR evaporation retarder.

**Curing and Sealing:** Curing is required. Cure with a Euclid Chemical high solids, water-based curing compound. (NOTE: A SOLVENT BASED CURING COMPOUND SHOULD NOT BE USED ON THIS PRODUCT). Under hot, windy or direct sunlight situations, apply a second coat of curing compound after the first has dried. If a curing compound is not desired, wet cure for a minimum of three days. When curing EUCOREPAIR V100 in potable water vessels, it is recommended to wet cure for 3 days, followed by 4 days of air cure prior to filling the vessel.

**Clean-Up**

Clean tools and equipment with water before the material hardens.

**Precautions/Limitations**

- Do not allow repairs to freeze until the material has reached a minimum of 1,000 psi (7 MPa) compressive strength.
- Do not use as a horizontal topping.
- Do not add admixtures or aggregate extension.
- When necessary, follow the recommendations in ACI 305R “Guide to Hot Weather Concreting” or ACI 306R “Guide to Cold Weather Concreting”.
- Use only potable water for mixing.
- Minimum application thickness 1/8" (3 mm).
- Minimum surface and ambient temperature 45°F (7°C) and rising at time of application.
- For optimum results, condition material to 65°F to 85°F (18°C to 29°C) at least 24 hours prior to use.
- Do not use a solvent based curing compound on this product.
- In all cases, consult the Safety Data Sheet before use.

---

**WARRANTY:** The Euclid Chemical Company (“Euclid”) solely and expressly warrants that its products shall be free from defects in materials and workmanship for one (1) year from the date of purchase. Unless authorized in writing by an officer of Euclid, no other representations or statements made by Euclid or its representatives, in writing or orally, shall alter this warranty. EUCLID MAKES NO WARRANTIES, IMPLIED OR OTHERWISE, AS TO THE MERCHANTABILITY OR FITNESS FOR ORDINARY OR PARTICULAR PURPOSES OF ITS PRODUCTS AND EXCLUDES THE SAME. If any Euclid product fails to conform with this warranty, Euclid will replace the product at no cost to Buyer. Replacement of any product shall be the sole and exclusive remedy available and buyer shall have no claim for incidental or consequential damages. Any warranty claim must be made within one (1) year from the date of the claimed breach. Euclid does not authorize anyone on its behalf to make any written or oral statements which in any way alter Euclid’s installation information or instructions in its product literature or on its packaging labels. Any installation of Euclid products which fails to conform with such installation information or instructions shall void this warranty. Product demonstrations, if any, are done for illustrative purposes only and do not constitute a warranty or warranty alteration of any kind. Buyer shall be solely responsible for determining the suitability of Euclid’s products for the Buyer’s intended purposes.